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杀虫植物苦皮藤种子的倍半萜酯

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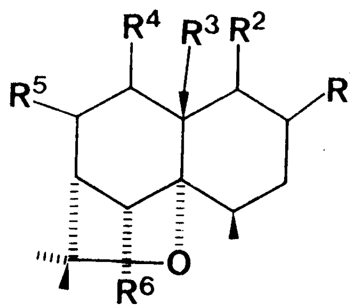
SESQUITERPENE POLYESTERS FROM THE SEEDS OF INSECTICIDAL PLANT CELASTRUS ANGULATUS

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Key words *Celastrus angulatus*; Sesquiterpene polyester; Dihydro-β-agarofuran; Insectcide

Celastrus angulatus Max. is a significant insecticidal plant dispersed widely over our country. For its antifeeding value, the roots have been studied chemically as a result of some new sesquiterpene polysters[1, 2]. The bioactive tests of its seed oil showed highly antifeedant effect on pieris rapae, Aulacophora femoralis, Henosepilachna vigintioctopunctata, Locastra muscosalis, colaphllus bowringi and Calospilos suspecta[3, 4]. In this continuing communication we report eight new sesquiterpene polyesters (1—8) isolated from the seeds of the plant by means of distribution and chromatography. Their structuret have been characterized by spectroscopic and chemical methods and relate to dihydro-β-agarofuran skeleton as follows.



	R^1	R^2	R^3	R^4	R^5	R^6
1	…OH	…OH	H	…OBz	…OBz	OAc
2	H	—OAc	H	…OBz	…OBz	OAc
3	—OAc	—OBz	OAc	—OAc	…ONic	H
4	—OAc	—OBz	OAc	—OAc	…OAc	H
5	H	—OBz	OAc	—OAc	…OAc	H
6	H	—OBz	OAc	—OAc	…ONic	H
7	H	—OBz	OiBu	—OAc	…ONic	H
8	H	—OBz	OPr	—OAc	…ONic	H

Bz = Benzoyl, Nic = Nicotinoyl, iBu = isoButyryl, pr = propionyl

References

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